
EDUCATION

Georgia Institute of Technology

January 2020

Master's of Science - Computer Science

- Incoming M.S. candidate

University of California, San Diego

September 2016 — June 2020

Bachelor of Science in Bioinformatics - Computer Science

Citizen's Award Recipient

- *Selected Coursework:* Software Programming, Data Structures I & II, Objected-Oriented Programming, Software Tools and Techniques, Algorithms & System Analysis, Molecular Sequence Analysis, Biological Data Analysis, Computational Linguistics, Advanced Bioinformatics Laboratory

EXPERIENCE

Software Development Engineer I — Amazon.com

September 2020 - Present

- AWS Cognito team

Software Development Intern — Amazon.com

June 2019 - September 2019

- Part of internal AWS team for ticketing, issue management, and agile process planning tools for all Amazon employees
- Designed and developed new data structures, logic and algorithm for issue and ticket severity promotion timers
- Full stack software development of workflows to show customers pertinent information regarding each trouble ticket
- End to end ownership: From investigation and writing design proposals, to managing code deployment through pipelines

Bioinformatics Software Intern — Murrell Lab (UCSD Antiviral Research)

April 2018 - January 2019

- Part of team that developed genetic sequencing software (Julia) for amplicon denoising
- Co-developed statistical samplers on real data-sets using Bayesian, Fourier, and likelihood models
- Developed an automated test suite for interoperability & packaged code to satisfy Julia metadata compliance

Frontend Web Developer — Sapie Space (Local Startup)

January 2018 - August 2018

- Led the team that designed and developed frontend framework for a social listing web application
- Integrated backend AWS Cognito Userpools (user authentication) and Elastic Search (real-time database)
- Developed and integrated tier-based user subscription paths and payments using Python Stripe API

Undergraduate Research Assistant — Hnasko Lab (UCSD School of Medicine)

September 2017 - June 2019

- Coded Med-PC IV programs for training mice with extensive statistical analysis on behavioral data from lab subjects

PROJECTS

Tutoring Push Notifications — UC San Diego Mobile Application

Fall 2018

- Worked on a team that designed a full stack API to notify students of upcoming tutoring sessions for their classes
- Client - Server data structures via REST API and reducers

Study Groups App — iOS App Store and Google Play Store

September 2018 - March 2020

- Designed, developed, tested, published, and maintained a cross platform social networking mobile app that allows students to connect with their peers at their academic institution to find and create study groups
- Real-time Firebase authentication and database integration

React Native Dating App — Available on public GitHub repository

June 2018

- Developed an open source frontend framework for a mobile app publicly made available on GitHub
- Coded user flow and authentication with swipe event handlers and mimic'd database object rendering

Resident Assistant — University of California, San Diego

August 2017 - June 2018

- Directed student conflict resolution, time management, peer mentoring, and academic and personal adjustments to college

PUBLICATIONS

Long-Read Amplicon Denoising — Nucleic Acids Research (IF: 11.147)

August 2019

- Fast Amplicon Denoising (FAD) and Robust Amplicon Denoising (RAD) along with a complete toolkit of functions that allow long-read amplicon sequence analysis pipelines (<https://academic.oup.com/nar/article/47/18/e104/5550323>)

Activation of Subthalamus Nucleus Stop Circuit Disrupts Cognitive Performance — eNeuro (IF: 3.460)

October 2020

- <https://www.eneuro.org/content/early/2020/09/03/ENEURO.0159-20.2020>

SKILLS

- **Technical:** Java, C, C++, Python, AWS, Firebase, Git, Bash, Julia, Javascript, React, Typescript, CSS, Clojure, GraphQL